

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/043,814	01/10/2002		Stanley K. Cheng	LWC/187	7857	
30480	7590	10/28/2004		EXAMINER		
		MAN, ESQ.	ALEXANDER, REGINALD			
3554 ROUND BARN BLVD. SUITE 303				ART UNIT	ART UNIT PAPER NUMBER	
SANTA RO	SA, CA	95403	1761			

DATE MAILED: 10/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applica	ion No	Applicant(s)	$-(\Delta$				
				''					
Office Action	Summarv	10/043,		CHENG, STANLE	Y K.				
J30 Addon	y	Examine	•	Art Unit					
The MAILING DATE	of this communication		L. Alexander	1761					
Period for Reply	oi uns communication	appears on ti	e cover sheet with the d	correspondence ad	ldress				
A SHORTENED STATUTO THE MAILING DATE OF T  - Extensions of time may be available after SIX (6) MONTHS from the ma  - If the period for reply specified abov  - If NO period for reply is specified ab  - Failure to reply within the set or extensions and the office late earned patent term adjustment. Se	HIS COMMUNICATION IN THE PROPERTY OF THE PROPE	N. R 1.136(a). In no e . I reply within the sta riod will apply and a atute cause the ar	vent, however, may a reply be tin atutory minimum of thirty (30) day will expire SIX (6) MONTHS from	nely filed s will be considered timely the mailing date of this or	y. ommunication.				
Status									
1) Responsive to comm	unication(s) filed on 1	4 September	2004.						
2a)⊠ This action is FINAL.									
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is									
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.									
Disposition of Claims									
4)⊠ Claim(s) <u>12-31</u> is/are	pending in the applica	ation							
			nsideration						
	4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.								
6)⊠ Claim(s) <u>21-31</u> is/are									
7) Claim(s) is/are objected to.									
8) Claim(s) are s	•	d/or election i	requirement.						
Application Papers			•						
9)☐ The specification is ob	piected to by the Ever	inor							
10) The drawing(s) filed on			N□ objected to by the F						
			be held in abeyance. See						
			red if the drawing(s) is object		5.4.4044.0				
11) The oath or declaratio									
		LAGITITICI. IV		Action of form PT	U-152.				
Priority under 35 U.S.C. § 119									
12) ☐ Acknowledgment is m		ign priority un	der 35 U.S.C. § 119(a)-	·(d) or (f).					
a)□ All b)□ Some * c	)☐ None of:								
1. ☐ Certified copies	of the priority docume	ents have bee	n received.						
2. Certified copies of the priority documents have been received in Application No									
3. Copies of the certified copies of the priority documents have been received in this National Stage									
	the International Bure								
* See the attached detail	ed Office action for a li	ist of the certi	fied copies not received	1.					
•									
Attachment/c\									
Attachment(s)  1) Notice of References Cited (PTO)	800)		<b>"</b> П						
2) Notice of Draftsperson's Patent D	rawing Review (PTO-948)		4) Interview Summary (i Paper No(s)/Mail Dat	PTO-413) e.					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  5) Notice of Informal Patent Application (PTO-152)									
Paper No(s)/Mail Date			6) Other:						
.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)	Office	Action Summa	гу	Part of Paper No./Ma	il Date 1004				

Art Unit: 1761

### **DETAILED ACTION**

### Claim Objections

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 11-30 should have been renumbered 12-31.

The application contained claim 1-11 not 1-10 as indicated by applicant. The claims should indicate the cancellation of claim 11 and the addition of new claims 12-31.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 12-17, 19-21, 23-25 and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng in view of Welhouse.

There is disclosed in Cheng a cooking pan comprising: a base 2 having an upper cooking surface, the surface being provided with a pattern of concentric corrugations 8 having ridges and grooves therebetween; and a non-stick coating 10 applied to the cooking surface. In regards to the claimed ridge to ridge spacing range, it is recited in Cheng that the range can be 2 mm or wider. See column 2, lines 25-30 and claim 1

Art Unit: 1761

where it is recited that the spacing can be "no more than about 2 mm". Cheng clearly discloses that a distance greater than 2 mm can be used. In regards to claims 13 and 20 and the ridge to ridge spacing range of 2.3 mm to 2.8 mm, it can be said that the disclosure of Cheng fits the claimed range. One skilled in the art would expect the same properties and results from the 2 mm disclosed in Cheng and the 2.3 mm – 2.8 mm range claimed. A prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v.* Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). The phrase "about" allows for sizes above and below the designated size, which in this case is 2 mm. In regards to claim 21, 2.5 mm is "about" 2 mm.

Welhouse discloses a distance between a ridge top 15 and a groove bottom 17 in the range of 0.005" to 0.012". It would have been obvious to one skilled in the art to modify the ridge top to groove bottom distance of Cheng as taught by Welhouse, in order to improve the heat transfer and drainage performance of the cooking pan.

In regards to the claimed radii of curvature being "about 4 mm", it is the opinion of the Examiner that such a desired range is accomplished by the combination of Cheng and Welhouse. The reason being that with the ranges being met the radius of curvature for the grooves could only be in the about 4 mm range.

In regards to claim 19 the above can be said about the range used to describe the ratio of the groove to groove spacing to the ridge top to groove bottom.

In regards to claims 16 and 24 and the use of stamping, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

Claims 18 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 11 and 18 above, and further in view of Tsai.

Tsai discloses an article of cookware having a base formed of stainless steel having a roughened cooking surface formed by arc spraying to improve adhesion of a non-stick coating.

It would have been obvious to one skilled in the art to modify the base of Cheng, as modified by Welhouse, with that taught by Tsai, in order to improve the adhesion of the non-stick layer.

Claims 14, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 12 and 19 above, and further in view of Doyle et al.

Doyle discloses that it is known in the art to have a cooking surface formed of projections 44, 46, 48 having a ridge to ridge spacing of about 2.8 mm (col. 4, lines 9-11).

It would have bee obvious to one skilled in the art to modify the cooking surface of Cheng, as modified by Welhouse, with that taught by Doyle, in order to improve the heat transfer and drainage performance of the cooking pan.

## Response to Arguments

Art Unit: 1761

Applicant's arguments filed September 14, 2004 have been fully considered but they are not persuasive. (See rejections above)

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reginald L. Alexander whose telephone number is 571-272-1395. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1761

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

rla October 25, 2004 Reginald L. Alexander Primary Examiner Art Unit 1761